

## Claims

1. Method for determining wear and tear in machines (10),  
characterized in that a current and/or voltage draw of at  
5 least one first subsystem (14) of a machine is determined  
during its operation and any wear and tear present in at least  
one second machine subsystem (18) of the machine is determined  
therefrom (20).
- 10 2. Method according to Claim 1,  
characterized in that the current and/or voltage draw is  
determined on a drive (14) of the machine and wear and tear  
present in a unit (18) driven by said drive is inferred  
therefrom.
- 15 3. Method according to Claim 2,  
characterized in that the machine's drive (14) and the driven  
unit (18) are in particular rigidly coupled to one another via  
a force and/or torque transmitter (16).
- 20 4. Method according to one of the preceding Claims,  
characterized in that a current and/or voltage signal of the  
machine is sampled, preferably with a frequency of between  
approx. 5 and approx. 20 kHz.
- 25 5. Method according to one of the preceding Claims,  
characterized in that, to determine the wear and tear,  
instantaneous values and/or average values and/or at least one  
frequency spectrum of a current and/or voltage signal of the  
30 machine (10) or more precisely of the drive (14) are used.
6. Method according to one of the preceding Claims,  
characterized in that further operating data of the machine  
(10) is used to determine the wear and tear (26).

7. Method according to Claim 6,  
characterized in that the further operating data includes the  
load state and/or the speed and/or an operating temperature  
5 and/or an operating pressure.

8. Method according to one of the preceding Claims,  
characterized in that the quality and/or type of material  
being processed by the machine (10) is inferred from the  
10 current and/or voltage draw of the machine (10) during its  
operation.

9. Coal grinding machine (10) having a drive (14) and a coal  
grinding mill (18) driven by same,  
15 characterized in that there is provided a device (20) for  
determining a current and/or voltage draw of the drive (14)  
during operation and a device (20) for inferring any wear and  
tear present in the coal grinding mill (18) on the basis of  
the current and/or voltage draw determined.

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10. Coal grinding machine (10) having a drive (14) and a coal  
grinding mill (18) driven by same,  
characterized in that there is provided a device (20) for  
determining a current and/or voltage draw of the drive (14)  
25 during operation and a device (24) for inferring the quality  
and/or type of the coal being processed by the coal grinding  
mill (18) on the basis of the current and/or voltage draw  
determined.

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